ature of the water was very gradually raised, and after a while the patient was placed in bed. The pulse became steady at 120. On the following morning he was much exhausted; his pulse was 120 and small. The temperature of the body was 38.2° Cent. (= 71.8° Fahr.). Consciousness returned, but it was not until the third day that he was able to give a connected account of his accident. The toes and fingers were of a dark blue colour, and blistered, as were also parts of the hands and feet. Having regard to the extreme venous congestion of the limbs, it was determined to practise suspension. The legs were inclosed in light wire framework, by which the heels were raised from two to three feet above the bed. The arms were also raised, and covered with cold compresses. The swelling subsided in twenty-four hours. The skin recovered its natural characters in seven days. The blisters, when pricked, had some of them dried up into dark crusts, while some underwent ulceration and granulation. The ultimate phalanges of two of the toes mortified, and were separated at the end of three weeks. The author regards the plan of treatment as having been eminently successful, and on these grounds recommends its adoption.—*London Med. Record,* Oct. 29, 1873 from *Dorpater Medicinische Zeitschrift,* vol. iv, pt. 2.

OPHTHALMOLOGY.

58. *Insufflation of Flowers of Sulphur in Diphtheritic Conjunctivitis.*—Dr. Bergmeister has communicated to the Vienna correspondent of the *Irish Hospital Gazette* (April 15, 1873), some nice results that he has obtained in diphtheritic conjunctivitis by insufflation of flowers of sulphur (the flores sulphuris loti of the Austrian pharmacopœia). In Austria cases of diphtheria are not so common nor so dangerous, either as regards the primary affection or the results on the cornea and conjunctiva, as in Germany. Sometimes, in the case of badly nourished and neglected children, it commences with the formation of crusts on the ocular conjunctiva (plica semilunaris), the palpebral conjunctiva, on the neighbouring skin, and on the mucous membrane of the nose and mouth, accompanied with fever; but these cases are the exception. It is usually preceded by some form of conjunctivitis (conjunctivitis lymphatica, blennorrhœa chronica), which has been neglected; and it would seem that its outbreak is favoured by constantly breathing the atmosphere of damp and foul rooms. When catarrhal conjunctivitis is epidemic here—as, without any doubt, it is now and then—croupous and diphtheritic forms are pretty often met with, usually consisting of well-defined infiltrations of the conjunctiva, some of which become absorbed during the course of the disease; some, becoming rapidly disintegrated, leave behind them ulcers which lead to more or less destruction. A painful swelling of the submaxillary gland of one or both sides forms a diagnostic mark between these affections and ordinary affections of the conjunctiva. Until lately this disease was treated expectatively in Arlt's clinique, for, with the exception of scrupulous cleanliness (constant removal of the secretion collected in the conjunctival sac, by injections of lukewarm water), nothing was used except an ointment to the forehead (unguent cinerei[1] ʒj, ext. opii aquos, gr. viij. *Signa:* to be rubbed on the forehead and temples every second hour); and, as a prophylactic for the protection of the cornea, a solution of atropia (atrop sulph. gr. ss, aquæ dest. ʒj), was dropped into the eye. The results, since Dr. Bergmeister has used insufflation of flores sulphuris, have been much more favourable than before, he being incited to further trials by the great success in the first case treated after the new method.

Case I. A girl, 10 years of age, who had been suffering from her eyes for fourteen days, was admitted into Arlt's clinique with well-marked diphtheria of the conjunctiva, and also of the mucous membrane of the nose and mouth. As there were already deep ulcers on the cornea, the treatment was confined to the ordinary precautions. As, however, the diphtheritic action still continued in spite of them. Dr. Bergmeister determined to try insufflation of flores sulphuris into the sac of the conjunctiva, and into the anterior and posterior nares, having previously cleared out the latter by injections of lukewarm water and a solution of chlorate of potash. The crusts on the lips were touched with a stick of caustic potash. The good effects of this treatment were very soon visible in the cleaning off of the crusts from the conjunctiva. The ulceration, it is true, penetrated one cornea, but this was quite unavoidable, and its further action was, at all events, checked; while the ulcerations on the other cornea became cleaner, and it was soon in process of scabbing. It was made evident at the same time, that the insufflation of the sulphur had no tendency to irritate the ulcer of the cornea, as often happens when calomel is used. It is also worthy of notice that the improvement in the conjunctiva and in the mucous membrane of the nose, that is to say. in the parts treated with flores sulphuris, was more immediate than on the lips where the crusts were touched with caustic potash, and the same was observed in all subsequent cases subjected to similar treatment.

---

[1] Mercurial ointment.

CASE II. A schoolboy, who had been troubled for a considerable time with conjunctival blennorrhœa, got a further subacute attack with œdema of the lids, chemosis of the ocular conjunctiva, and enormous swelling of that portion which joins the latter with the conjunctiva palpebrarum, with the formation of button-shaped elevations, whose tips were covered with diphtheritic crusts. The submaxillary gland was swelled. and there was moderate fever. At first the treatment consisted in the instillation of atropia into the eye, the application of the before-mentioned ointment to the forehead, and the most scrupulous cleanliness. In three days the whole conjunctiva was in a state of gray infiltration, the cornea was dull, and below and internally there was a small, marginal ulcer. The insufflation of flores sulphuris, once a day, was now tried; in three days the parts that had been covered with the diphtheritic exudation were quite clean, and the infiltration of the conjunctiva had disappeared. Recourse was now again had to the lapis,[1] and in ten days the ulcer of the cornea was healed, and all trace of diphtheria had disappeared.

CASE III. Another patient was a man, aged 24, who had had conjunctivitis diphtheritica for four days. There was a good deal of fever, with œdema of the lids, gray infiltration of the conjunctiva, and a deep ulcer in the conjunctiva of the lower lid; the cornea was intact. the submaxillary glands swelled. The treatment at first consisted in cold compresses, atropia, and the ointment to the forehead. This was continued for two days, when it was found that the infiltration had increased, and insufflation of flores sulphuris was then tried. On the following day the ulcer of the conjunctiva was quite clean, and in five days the cure was complete.

CASE IV. A fourth case was that of a girl 7 years old, who had been suffering for a month from conjunctivitis lymphatica. Four days before admission she got fever, and the submaxillary glands and the glands of her neck swelled. The lips, mucous membrane of the nose. and the whole conjunctiva were covered with numerous yellow crusts, with the secretion of stinking matter from the nose. There was a marginal. sickle-shaped ulcer on the cornea. In eight days the parts treated by insufflation were quite recovered, whereas the crusts on the lips, which were touched with caustic potash, required eight days more.

CASE V. Another case, in which there was conjunctivitis crouposa, with œdema of the lids, the formation of a superficial croupous membrane on the conjunctiva palpebrarum, and extensive gray infiltration underneath it, with chemosis, the cornea being intact, was cured after eight days' treatment by insufflation.

The use of flores sulphuris in cases of diphtheria is not exactly new. As early as the year 1868 it was recommended by the French and Spanish physicians in cases of diphtheria of the throat, and favourable reports of it appeared in No. 20 of the *Gazette Médicale*, Paris, 1868, as also in the *Union Médicale*, 1869.

---

[1] Caustic potash.

Seitz, of Munich, has also made successful experiments with it, and has published the favourable results he has obtained by sulphur in parasitic diseases.

59. *Operation for the Extraction of Cataract complicated with Adhesion between the Capsule of the Lens and the Iris* —This form of cataract presents great difficulties to the ordinary methods of extraction. The method which M. L. De Wecker adopts is the following:—

"*First period.*—Having introduced the speculum, and studied the globe by means of the fixation forceps carefully applied close to the inferior border of the cornea, I make an incision with a small flap having a height of 2 mm., similar to that which I recommend for the extraction of simple senile cataracts. I enter a Graefe's knife at a distance of one millimetre from the superior and external border of the cornea, and pass it directly through the cornea and behind the iris. The knife is then glided on parallel to the posterior surface of the iris, and passed out again after the counter-puncture, at the same distance of one millimetre beyond the superior internal border of the cornea. By paying very particular attention to the position of the knife, so as to keep it perfectly parallel with the iris, the execution is not difficult, for the breadth of a well-made knife then gives the exact height required for the flap, namely, 2 mm. The section being completed, we at once obtain a corneal wound, measuring internally 9½ mm., together with a corresponding wound of the same extent in the iris. As a rule, by making the section with precision, the lens is not touched, and in every case where it is performed in accordance with the rules laid down all escape of vitreous is avoided.

"*The second period* of the operation is devoted to the laceration of the capsule. After carefully wiping the eye with a sponge, and turning the conjunctival flap down on the cornea, I make gentle pressure on the globe with the fixation forceps, for the purpose of causing the wounds in the cornea and iris to gape. During this manœuvre the border of the lens presents itself in the wound, and the capsule may be easily lacerated the whole extent of the section, and close to the equator of the lens.

"*The third period* of the operation consists in the removal of the lens, which is affected by means of a gentle pressure, combined with an upward stroking movement made (above the fixation forceps) with the caoutchouc curette, just as in cases of ordinary extraction. As a rule, the expulsion of the viscid lens is accomplished without much difficulty through this large opening in the cornea and iris.

"*The fourth period* is devoted to the excision of the portion of the iris corresponding to the wound of the cornea, together with the removal of the masses of exudation and the parts of the capsule which are adherent. To effect this, I employ the scissor-forceps M. Lüer has manufactured according to my directions, one branch of which I pass behind the cornea in front of the iris, whilst the other branch is passed behind the thickened membrane. By making two sections which converge towards the inferior border of the pupil, a triangular flap is formed, which is easily removed with the forceps, and thus we at once obtain a perfectly clear pupil.

"Should no escape of vitreous occur during the formation of the pupil, I proceed to clear away any cortical masses which may remain behind the iris, in the same manner as in the ordinary operation for extraction of cataract. If, however, it becomes impossible to remove these cortical masses, their presence need not cause any uneasiness after making such a large pupil, for their absorption will take place without producing any alarming symptoms of irritation.

"Thus, by a single operation, we obtain a result which the method recommended by Von Graefe scarcely permitted us to attain after a second tentative operation. Moreover, by adopting the method I advocate, it is always possible to modify it in accordance with the novel conditions which may present themselves during the operation. In fact, if, after making the section of the cornea and iris, I find that the pathological changes which have taken place in the iris are less important than the appearance of the eye before the operation led me to expect, I make a change as regards the method of lacerating the capsule.

"Suppose, for example, after the first period of the operation, the iris retracts towards the obstructed pupil, and the simple section of the iris with the knife has produced a narrow, jagged pupil, through which the cataractous lens appears; in such a case, simply drawing the eye downwards with the fixation forceps, without making any pressure on the globe, I introduce the cystitome on the flat into the pupil I am about to make, and easily detach the iris from the capsule with the back of the instrument. That done, I endeavor to form a triangular flap in the capsule, executing the same movements behind the iris as in the ordinary operation for extraction, with a free pupil, enlarged by the excision of a portion of this iris. In such a case, owing to the complete freedom of the iris, the manipulation of the scissor-forceps becomes much easier once the cataract is removed. The employment of the scissor-forceps is here again very much to be preferred to that of the simple forceps, with which the iris must be drawn out, in order to be excised, for all injurious traction, with rupture of the hyaloid, may be avoided by using the scissor-forceps with dexterity.

"My method of operating differs from those hitherto adopted, in the following particulars:—

"I do not rest satisfied, as Wenzel did, with an insufficient enlargement of the pupil, a method which, in the majority of cases, eventuates in a new occlusion of the pupil so formed.

"Contrary to the mode of operating adopted by Von Graefe, I do not postpone the formation of the pupil to a second operation, at which recourse is had to instruments calculated to exert violent traction, together with strong hooks, which at the same time tear the iris and vitreous. The excision of a portion of the iris (remaining in position behind the cornea) by means of the scissor-forceps is, of all the methods hitherto employed, the only one which allows us by the one operation to remove the iris, the masses of exudation, and the thickened capsule, and that without any injurious traction being made upon the ciliary body, or the occurrence of prolapse of the vitreous, a circumstance Von Graefe looked upon as indispensable to the success of the operation.

"We venture to hope that, owing to the facility with which the new scissor-forceps can be manipulated, a practice will come into general vogue which is calculated to render unquestionable service in more than one case, where the boldness of surgery has not hitherto dared to venture."—*Irish Hospital Gaz.*, Nov. 1, 1873, from *Ann. d'Oculisque*, livreson 5th and 6th, 1873.

---

60. *Exophthalmic Goitre.*—Mr. SWANZY relates (*Irish Hospital Gazette*, Sept. 1, 1873) a case of this, and calls special attention to a pathognomonic sign of the disease, namely, the imperfect continuous consensual movement of the upper lid when the gaze is directed downwards. This is no direct consequence of the exophthalmos, for in cases of tumour of the orbit and other diseases which cause protrusion of the eyeball, the symptom is uncommon, although, indeed, in these cases when the prominence is very great, the motion of the lid is of course interfered with. But in Graves's disease this symptom exists (at least in the commencement of the disease), even with a very slight degree of exophthalmos, when the eyeball is scarcely more prominent than in some short-sighted people. In the course of the disease this symptom may disappear without any diminution in the exophthalmos. It seems probable that it depends upon some disturbance of innervation in the orbicularis. The rarity of involuntary nictitation in our case, and which is not uncommon in the disease, is probably to be referred to the same cause. This imperfect immobility of the upper eyelids is of importance as a diagnostic sign in cases where the tumefaction of the thyroid is but very slight (as in our case), and the excessive heart's action little marked. And also in cases of the disease when one eyeball is more prominent than the other, as sometimes happens; such cases being very apt to mislead.

According to Virchow[1] the heart after death has usually been found enlarged and dilated, especially the left ventricle, even when the valves were healthy. Occasionally the aorta and larger vessels have been found atheromatous. Clinically, hypertrophy of the heart belongs almost exclusively to an advanced stage of the disease. The exophthalmos depends upon changes in the adipose and cellular tissue of the orbit, which sometimes is found hypertrophied, but for the most part merely swollen from hyperæmia. With regard to the pathology of the thyroid gland in the disease, there do not seem to be any constant appearances found. It may be almost normal, or simply hypertrophied, or hypertrophied with large varicose vessels, or contain hytadid cysts.

The starting point of the disease is still unknown to us. That it is not situated in any of the three organs which are so prominently affected, is evident from the fact that the part which any one of these plays may be almost or completely wanting. That it is a disease of the blood is a theory which—while it affords an easy and favourite mode of escape from such difficulties—is not here capable of satisfactory proof. Experience, at least, does not teach us that the sufferers from exophthalmic goitre labour usually (although they doubtless sometimes do) under anæmia or chlorosis; nor are they commonly the subjects of inherited or acquired syphilis; nor, so far as we are aware, of a strumous habit, or of tuberculosis. There seems to be a good deal of evidence in favour of the origin of the disease being situated in the nervous apparatus, especially in the sympathetic system. Thus, Drs. Cruise and Robert McDonnel, in a case examined by them,[2] found the inferior cervical sympathetic ganglia almost obliterated and supplanted by cellular and adipose tissue. Some foreign investigators, too, including Recklinghausen,[3] have observed a somewhat similar condition, while one or two have seen the cervical ganglia enlarged, and resembling lymphatic glands "in the first stage of tuberculosis."

MIDWIFERY AND GYNÆCOLOGY.

61. *Fortnightly Hemorrhage during Pregnancy.*—Dr. S. HAYNES read the following case of this before the Worcester Med. Soc. H. H., æt. 36, states that in all her pregnancies there has been a hemorrhagic uterine discharge, more profuse than her menses (which are of usual quantity and quality), but of exactly the same nature, every fortnight up to the sixth month, whence, until labour, there has been no loss. Each flux is preceded by a few days' very severe headache, and is accompanied by much dorsal pain and very bad bearing-down sensations. She never has any leucorrhœa. When not pregnant, she has regular monthly catamenia; an abundant discharge every fortnight is therefore her test of pregnancy; this recurs fortnightly for four or five months after each labour; the menses then become natural. She has had seven children: all carried to full time, and born alive and perfect. When she was pregnant with her first, the hemorrhage was so copious that her medical attendant told her the pregnancy could not go on. It was not more abundant then than it has always been since. Treatment, position, and rest, had no influence; so she now takes no extra precautions during her pregnancies. She does not lose much after her confinements, and there are no ordinary indications of hemorrhagic diathesis. She is a stout plethoric woman, who says she "makes blood" very quickly, and that her mother used to be often bled with benefit, and died from apoplexy. I attended her in her last confinement, when I did not find anything unnatural. She objects to any local examination.—*Brit. Med. Journ.*, Nov. 29, 1873.

---

[1] Die Krankhaften Geschwulste, B. III. p. 76.

[2] *Vide* a paper by Dr. W. Moore, in Dub. Quart. Journ., Nov., 1865.

[3] Deutsche Klinik, 1863.